

THREE SAILS POINT, WIDNES

Remediation Works

The site was understood to be redeveloped for residential use, inclusive of a Public Open Space (POS) area. The proposed POS area contained existing contaminated stockpiles that were produced during the early stages of site development. The development was put on hold until the contaminated materials were effectively managed. Vertase FLI were awarded the contract to manage the suitable and unsuitable materials within the existing stockpiles and construct the POS area.

The works addressed one large and two smaller stockpiles of made ground and Galligu waste. Galligu waste is a by-product of the historical soda ash manufacturing process, and its properties make it unsuitable for reuse.

CLIENT: MAGENTA LIVING
LOCATION: WIDNES
PROJECT VALUE: £1,900,000
DURATION: 23 WEEKS
SERVICES PROVIDED: EXCAVATION AND SEGREGATION OF CONTAMINATED AREAS. EXPORT OF HAZARDOUS AND NON-HAZARDOUS MATERIALS, CUT AND FILL EARTHWORKS, PLACEMENT OF GEOTEXTILE LINER, IMPORT OF TOPSOIL MATERIALS, LANDSCAPING.



VertaseFLI Role:

The contamination priority areas identified for disposal were presented at tender, defined by the consultant. The three stockpiles comprised approximately 34,000m³ of deposited contaminated material. VertaseFLI divided the areas up further to allow segregation of materials depending on the most suitable and cost effective offsite disposal destination.

The pre-classified priority areas were set out on site by our surveyor and under the supervision of an environmental engineer were segregated further within specific layers into three divisions of material. Each division was organised for export to a suitable licensed disposal facility. To achieve the designed levels for the POS area, some surplus materials outside of the priority areas were also disposed of. Additional disposal materials were chosen based on their chemical and geotechnical suitability.

The existing stockpiles that were managed consisted mostly of the made ground Galligu. However, two areas consisted of a layer of clay. The clay was historically imported clean cap material from the previous phases of work. The clay was also segregated and after chemical validation was utilised as clean cap material above the geotextile liner. To achieve designed clean cover levels for the POS landscaping, additional clean cap material was sourced and imported by VertaseFLI.

The POS area was reinstated with a geotextile liner and designed clean cover system comprising clay/sand subsoil and imported BS3882 compliant topsoil above. The proposed landscape design, inclusive of trees, shrubs and grass, was then established and managed over a two-year period. This was alongside the construction of additional ecological features to support the surrounding wildlife.

Due to the geotechnical nature of the made ground and winter weather conditions, the earthworks portion of the project was very difficult. Despite the challenges, the project was delivered on time with additional works also completed. Our collaborative relationship with the client continued throughout the landscape management and additional needs that arose once site construction continued.

Additional works included the excavation and construction of a clean corridor and wet well to support the proposed site drainage. It was possible that the proposed drainage trench and wet well sat within unsuitable material that could cause issues for the client in the continual development of the site. VertaseFLI pride ourselves on identifying potential issues and reacting to them promptly for a smoother project delivery.



MATERIAL SEGREGATION



MATERIAL SEGREGATION AND EXPORT



MATERIAL SEGREGATION



LINING THE POS AREA



CLEAN COVER SYSTEM POS REINSTATEMEN



TOPSOIL IMPORT